

Fig. 1 Schematic diagram of typical AC-plasma display panel (AC-PDP).

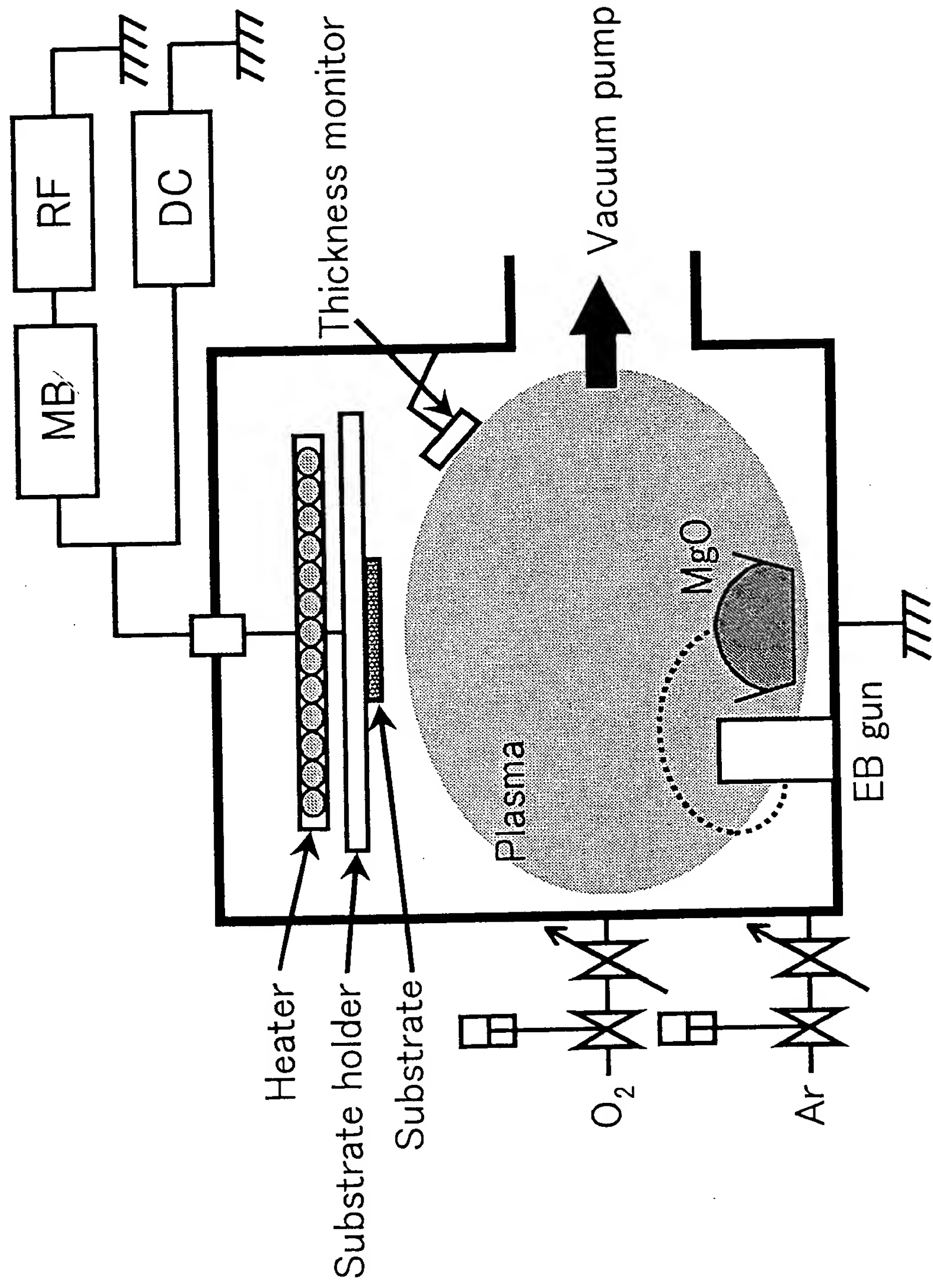


Fig. 2 Schematic diagram of the advanced ion-plating (AIP) apparatus. RF oscillator, matching box and DC power supply are denoted by RF, MB and DC, respectively.

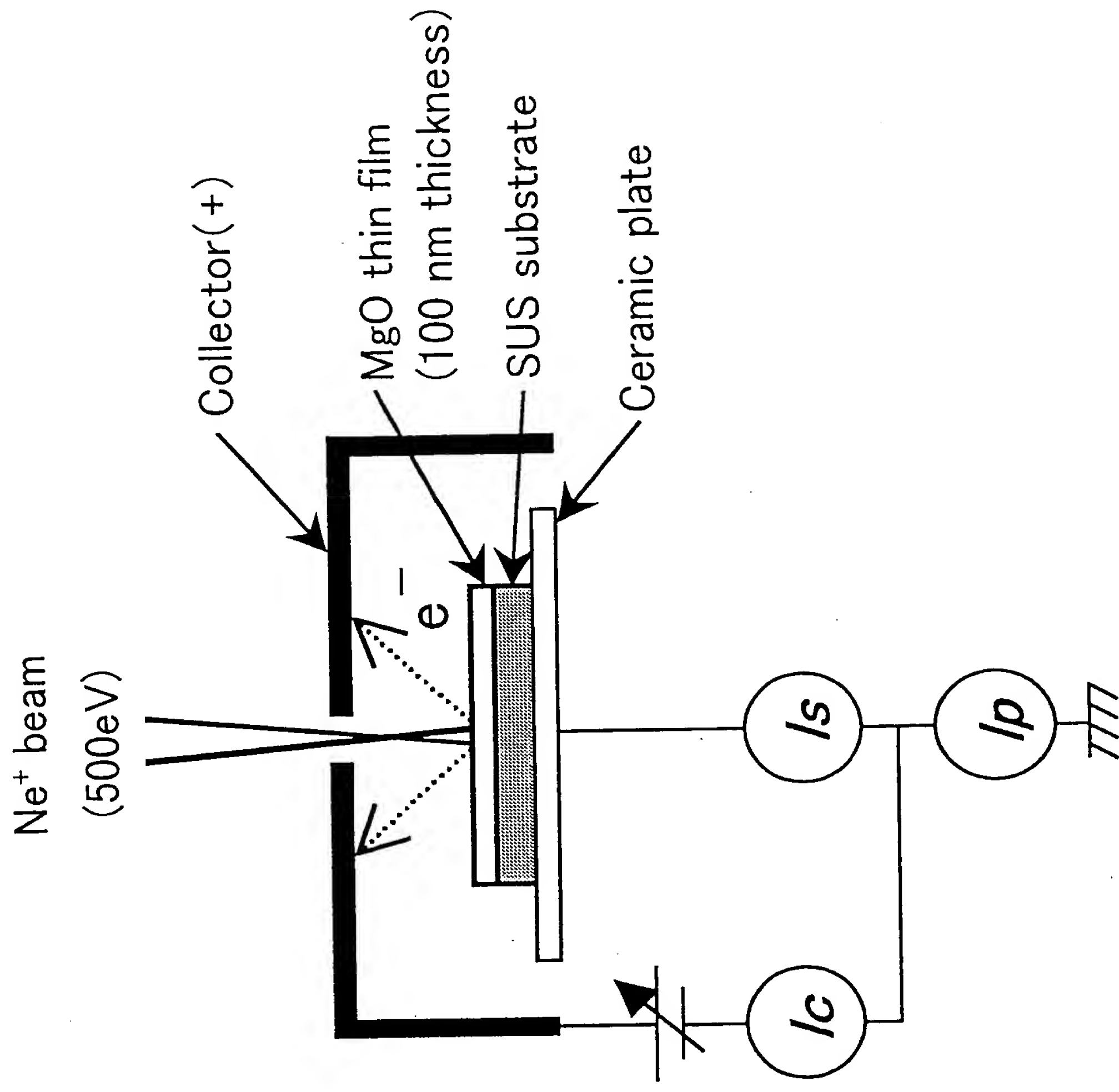


Fig. 3 Schematic diagram of setup for secondary electron measurement.

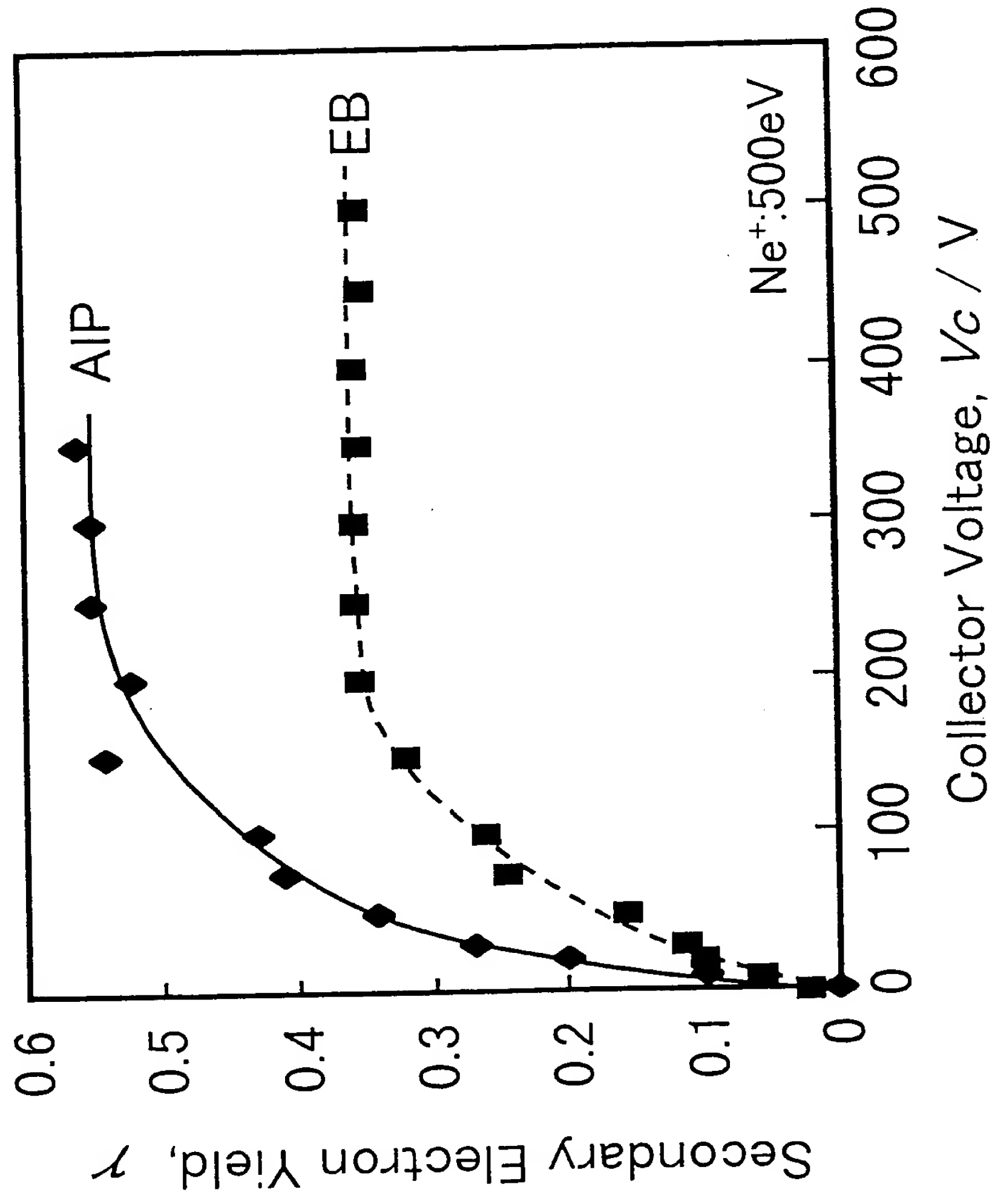
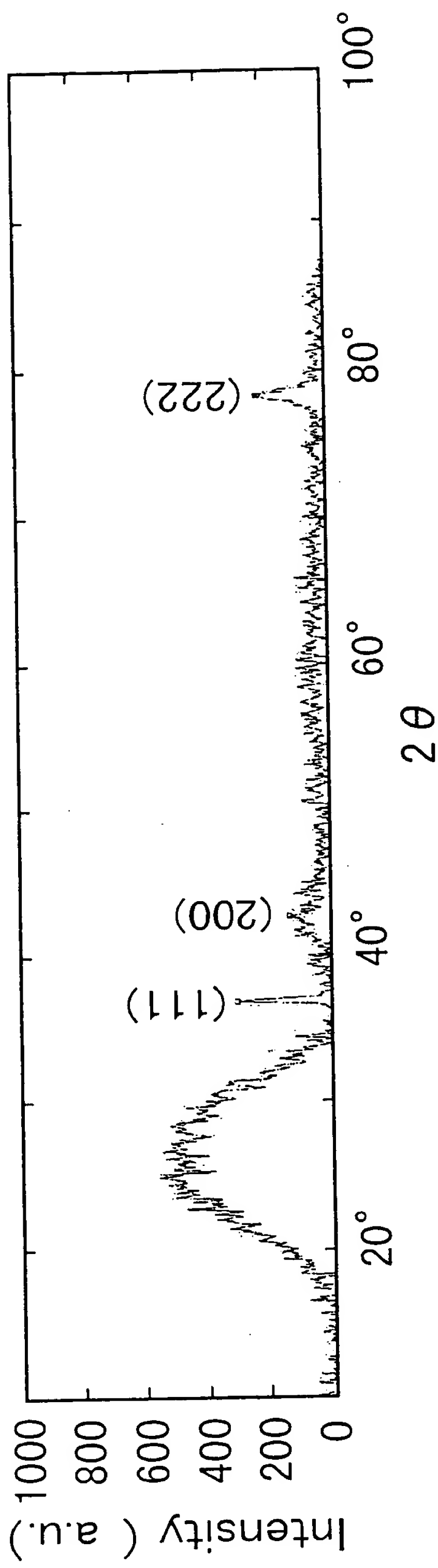
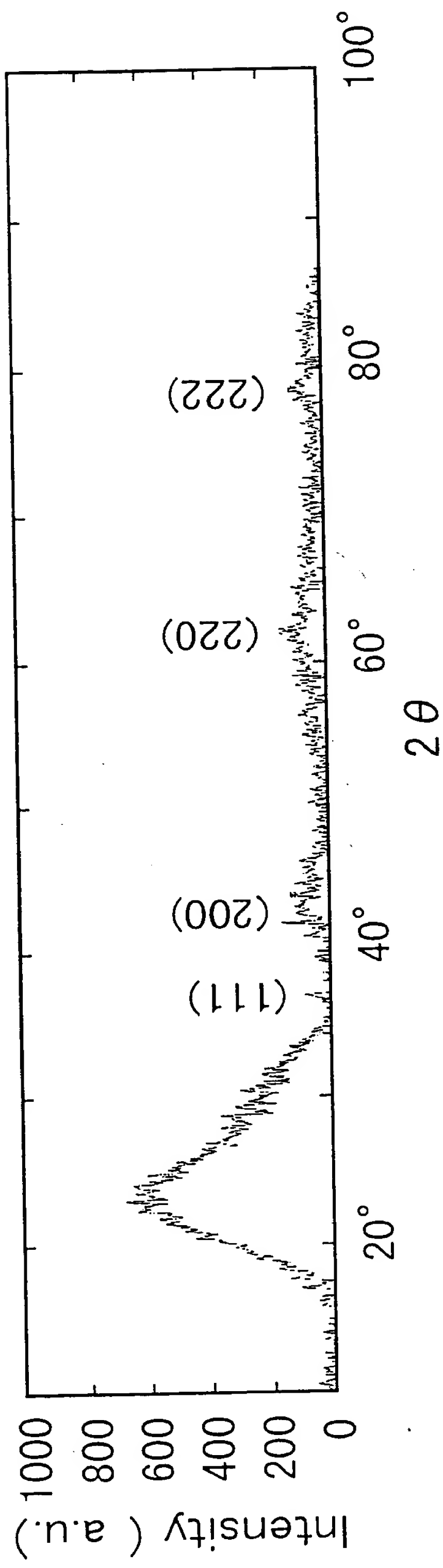


Fig. 4 The secondary electron emission coefficient,  $\gamma$ , as a function of the collector voltage,  $V_c$ , for the AIP and EB films. The  $\gamma$  for AIP was 0.55 and that for EB was 0.35.



(a) MgO Thin Film Deposited by AIP (100nm)



(b) MgO Thin Film Deposited by EB (100nm)

Fig. 5 XRD pattern of MgO thin film deposited by (a) AIP and (b) EB.

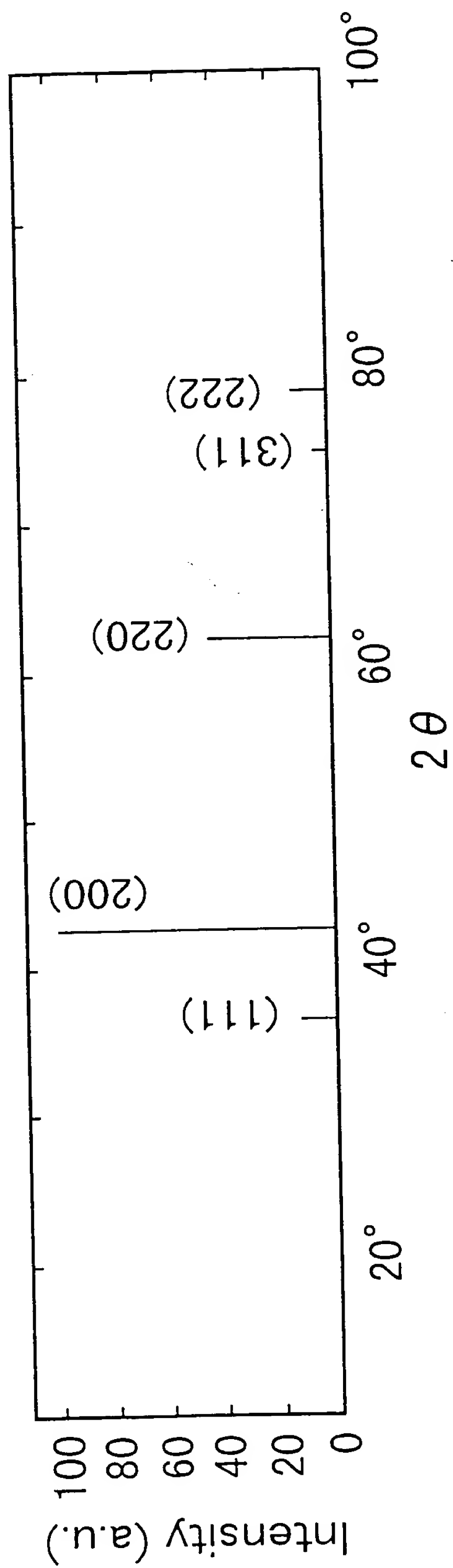
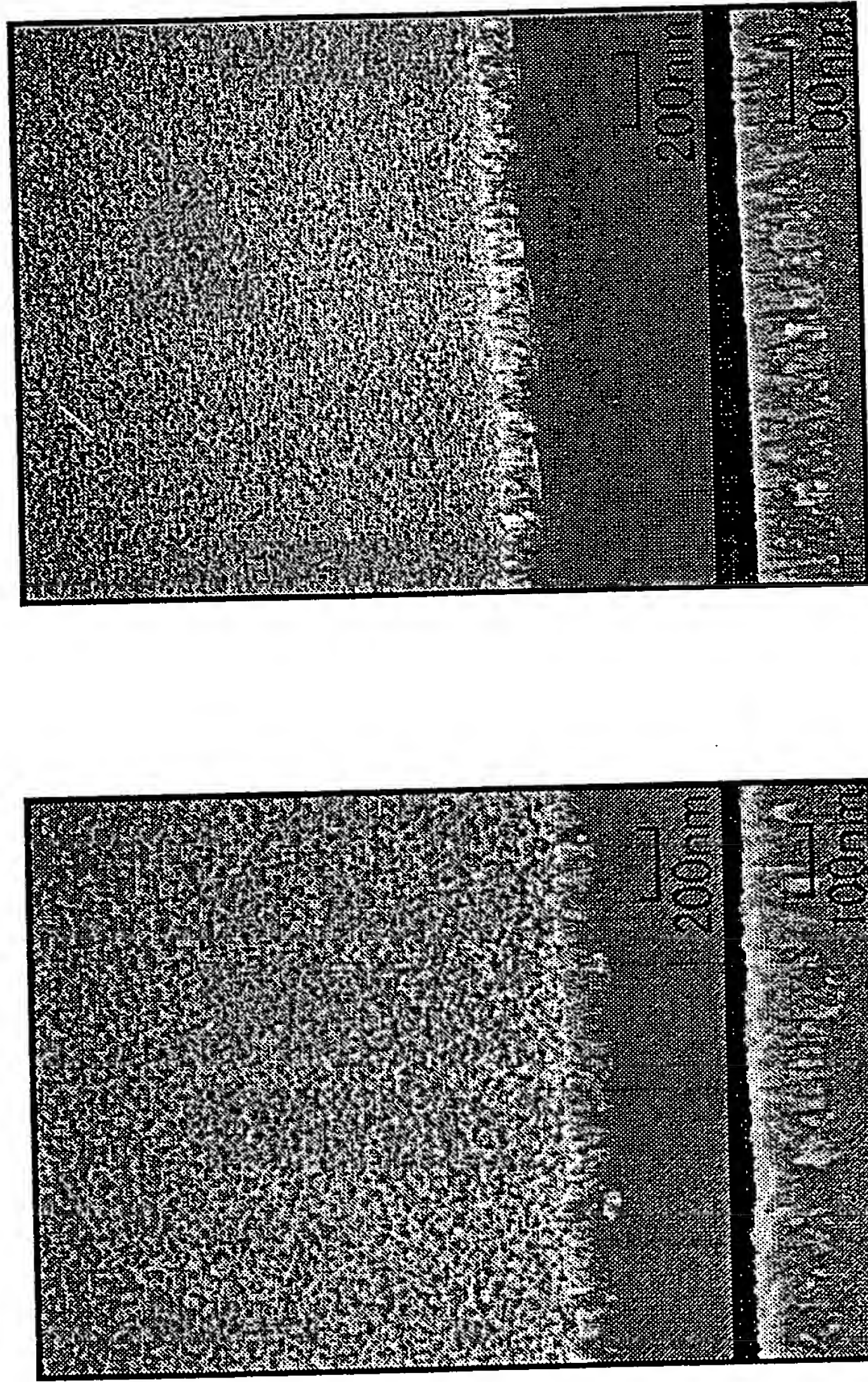


Fig.6 XRD pattern for MgO polycrystalline powder.





(a) AIP

(b) EB

Fig. 7 SEM images of MgO thin films with 100 nm thickness deposited by (a) AIP and (b) EB.



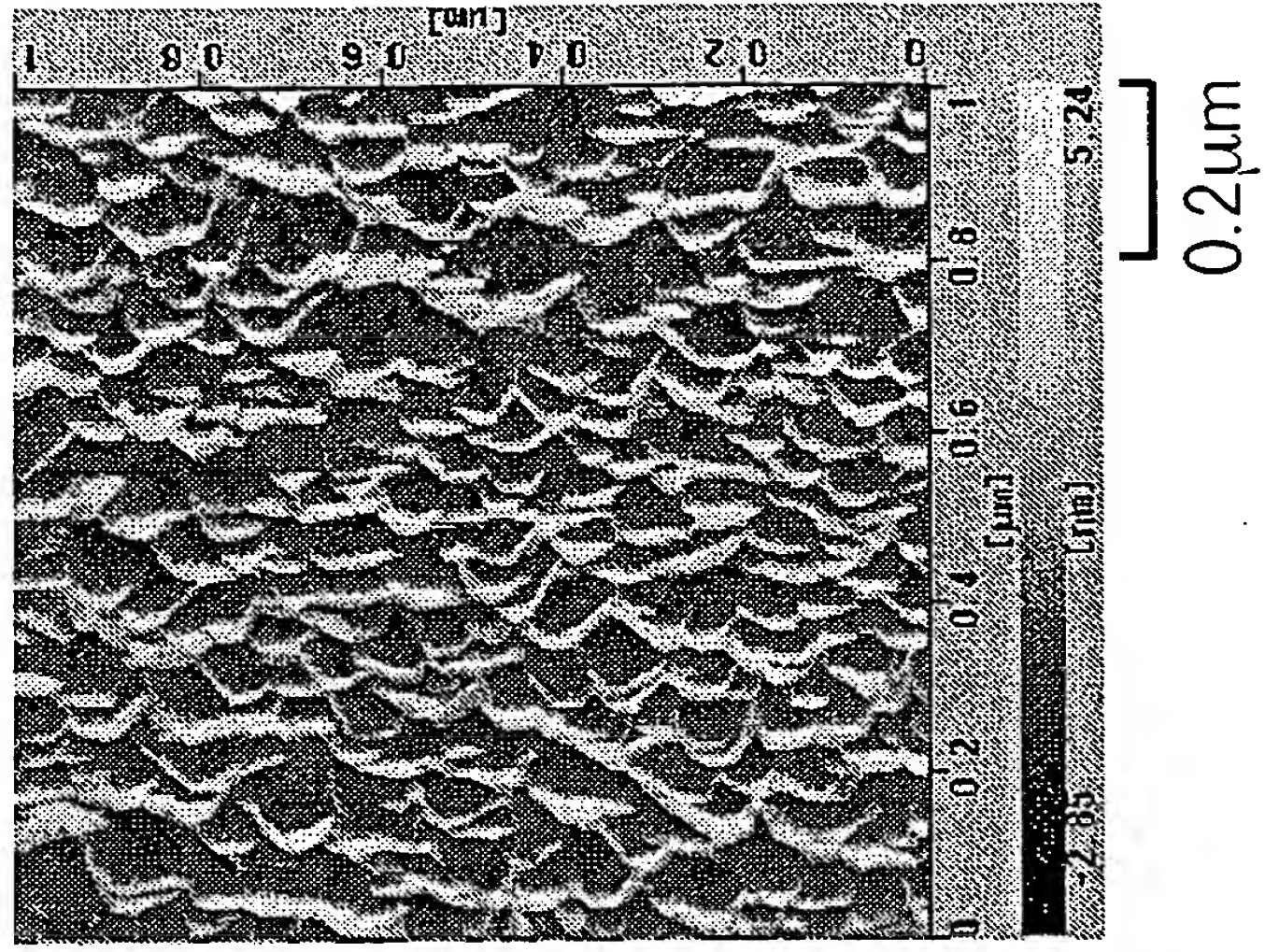
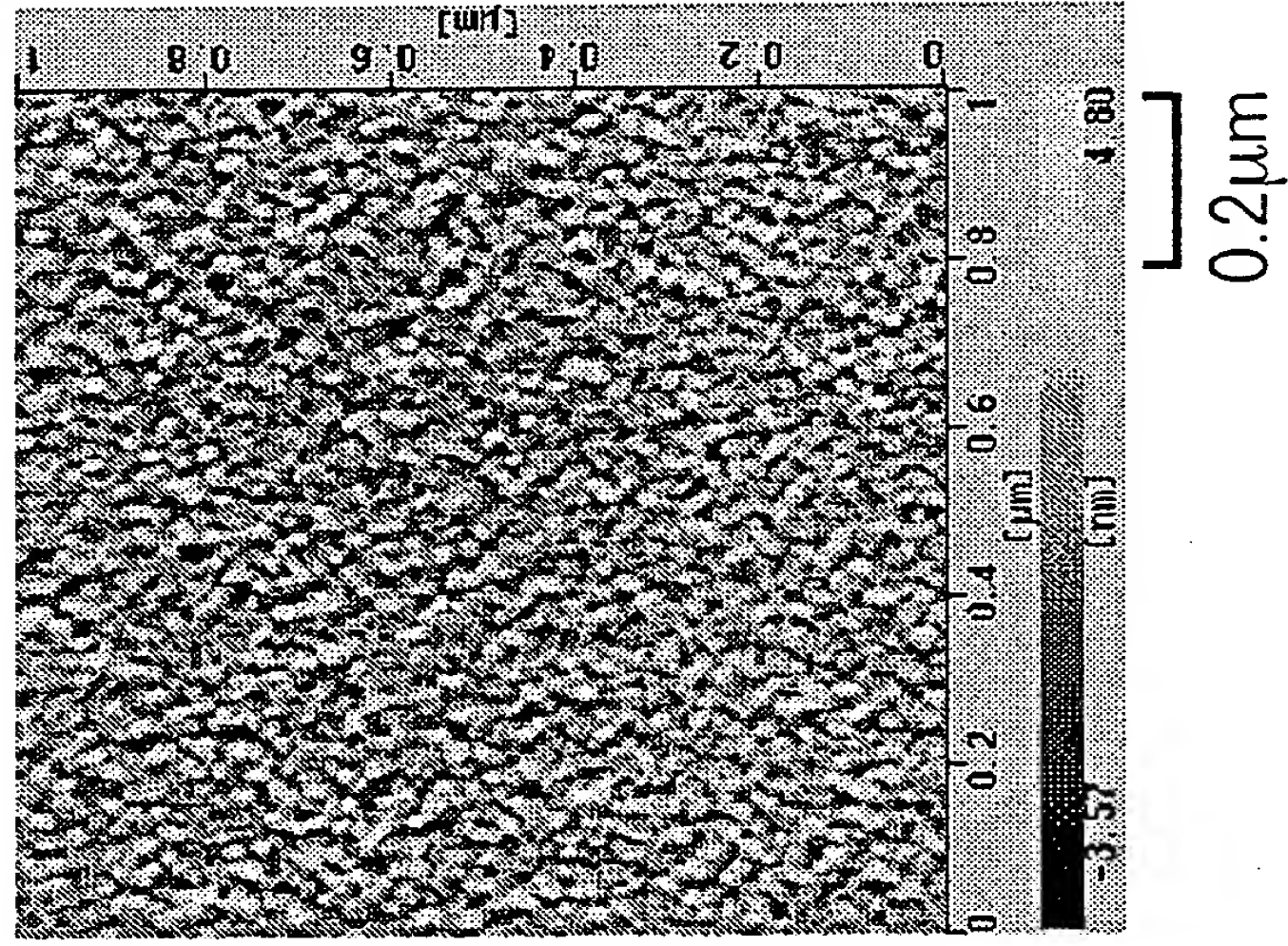
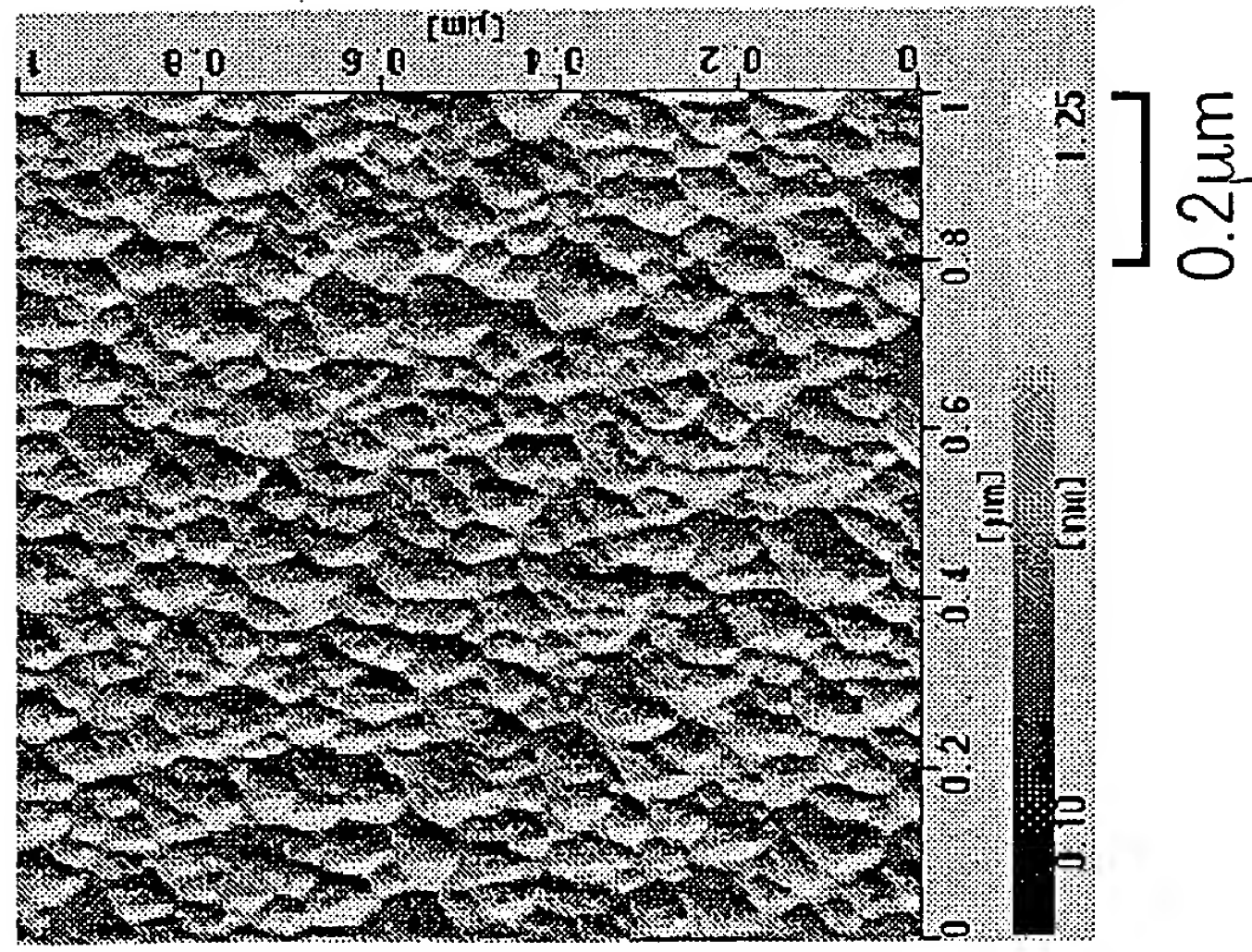


Fig. 8 AFM images of various MgO thin films.